REMARKS

The Official Action dated August 24, 2004 has been received and it's contents carefully noted. In view thereof, the specification and claims 1-8 have been amended in order to better define that which the Applicant regards as the invention. As previously, claims 1-8 are presently pending in the instant application.

Initially, it is noted that the drawings have been objected to by the Examiner. The Examiner notes that Figure 1 should include the legend "PRIOR ART" as this figure illustrates only that which is known in the art.

Filed concurrently herewith is a Request for the Consideration of Substitute Drawings, wherein Figure 1 has be resubmitted and includes the legend "PRIOR ART" as required by the Examiner. Accordingly, it is respectfully submitted that Applicant's several figures are now in proper condition for allowance.

With respect to Applicant's specification, with the foregoing amendments, minor typographical errors have been corrected in the specification and no new matter has been added. Consideration of the foregoing amendments is earnestly solicited.

Claims 1, 2 and 8 have been objected to as including minor informalities. As can be seen from the foregoing amendments, each of those informalities noted by the Examiner have been cured. Accordingly, it is respectfully submitted that claims 1, 2 and 8 as well as claims 3-7, are now in proper condition for allowance.

Turning now to page 3 of the Official Action, claims 1-4 and 6 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,289,000 issued to Yonge, III in view of U.S. Patent No. 6,535,489 issued to Merchant et al. This rejection is

respectfully traversed in that the combination proposed by the Examiner neither discloses nor suggests that which is presently set forth by Applicant's claimed invention.

As can be seen from the foregoing amendments, independent claim 1 is directed to an apparatus for Physical Layer (PHY) signal control in a local area network (LAN), with the apparatus comprising a first means for connecting the PHY signal control apparatus and a Media Access Layer (MAC) means, to enable data transmission between the apparatus and the MAC means, and a second means for controlling the first means to selectively transfer general data on the LAN or a specific warning data to the MAC means, such that the specific warning data, generated by the apparatus, comprises a source address with all-zero bytes. Clearly, Yonge, III when taken alone or in combination with the teachings of Merchant et al. fails to disclosure or suggest such features.

Although, as noted by the Examiner, Yonge, III may disclose an apparatus including elements similar to the first and the second means of the present invention and Merchant et al. may disclose the use of a linkchange bit for indicating the status of a link, they together fail to teach or suggest all the claim limitations. That is, the linkchange bit itself carries information to indicate the current status of the link. The warning data of the present invention notifies the MAC device to update the transmission configuration by setting the source address with all-zero bytes. Once the MAC device receives the warning data, the current transmission configuration of the PHY apparatus is read and the transmission configuration of the MAC device is then changed to be consistent with that of the PHY apparatus. The warning data, unlike the linkchange bit, is used to warn the MAC device of a transmission configuration change but does not carry information of the current transmission configuration by itself.

Furthermore, the linkchange bit has only two values, 1 and 0, to indicate two statuses of the link. Merchant et al. discloses that it may be used to indicate whether the link status is changed or to indicate the link direction. The warning data of the present invention does not carry information of the current transmission configuration by itself so the MAC device of the present invention may receive more than two different statuses of transmission configuration under the effect of one warning data. As the specification has depicted, these statuses include transmission speed and duplex mode. The information of these statuses can reach the MAC device at the same time. More specifically, with Applicant's claimed invention, the number of status transmission would not be limited by the size of the warning data.

Moreover, the device of Merchant et al. needs a polling engine to detect a change in status of a physical link, and to send an interrupt signal to indicate the change. The present invention simply utilizes a warning data with certain zero-valued bytes in a regular data transmission format to inform the MAC device of a change. The present invention does not need a polling engine or the like, and does not interrupt regular data transmission.

Accordingly, for the foregoing reasons, it is respectfully submitted that Applicant's claimed invention as set forth in independent claim 1 as well as those claims which depend therefrom, clearly distinguishes over the prior art of record and is in proper condition for allowance.

Turning now to page 6 of the Official Action, claim 5 has been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,289,000 issued to Yonge, III in view of U.S. Patent No. 6,535,489 issued to Merchant et al. as applied to claim 2 above, and further in view of Applicant's Admitted Prior Art (AAPA). This rejection is likewise

respectfully traversed in that the AAPA relied on by the Examiner fails to overcome the aforementioned shortcomings associated with the combination of Yonge, III and Merchant et al. and thus neither discloses nor suggests that which is presently set forth by Applicant's claimed invention.

In that claim 5 is directly dependent on claim 2 and includes all of the limitations thereof as well as independent claim 1, the subject matter of which is neither disclosed in nor suggested by the combination proposed by the Examiner, it is respectfully submitted that claim 5 likewise distinguishes over the combination proposed by the Examiner for at least the reasons discussed hereinabove and is in proper condition for allowance.
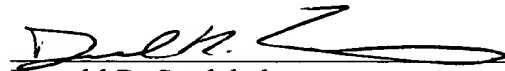
Referring now to page 7 of the Office Action, claim 7 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Merchant et al. when taken alone. This rejection is respectfully traversed in that the patent to Merchant et al. fails to disclose or suggest that which is presently set forth by Applicant's claimed invention.

Although Merchant discloses the use of a linkchange bit for indicating the status of a link, it fails to teach or suggest that the use of the warning data with certain zero-valued bytes in a regular transmission format. The differences between the warning data of the present invention and the linkchange bit of Merchant have been stated in details above. Accordingly, it is respectfully submitted that Applicant's claimed invention, as set forth in independent claim 7, clearly distinguishes over the patent to Merchant et al, for at least the reasons discussed hereinabove and is in proper condition for allowance.

Therefore, in view of the foregoing, it is respectfully requested that the objections and rejections of record be reconsidered and withdrawn by the Examiner, that claims 1-8 be allowed and that the application be passed to issue.

Should the Examiner believe a conference would be of benefit in expediting the

prosecution of the instant application, he is hereby invited to telephone counsel to arrange

such a conference.

Respectfully submitted,

Donald R. Studebaker
Reg. No. 32,815

Nixon Peabody LLP
401 9th Street N.W.
Suite 900
Washington, D. C. 20004
(202) 585-8000

W620714.1